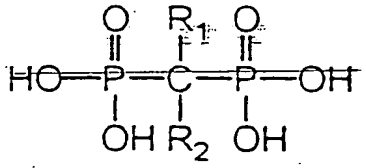
CLAIMS

1. Process for treating lameness with an osseous, articular or osteoarticular component, comprising the administration, to a human or to an animal not suffering from arthritis or from fractures, of an effective amount of a bisphosphonic acid derivative of formula:



in which:

- R_1 represents a hydrogen atom, a halogen atom, a hydroxyl, an amino, a mono(C_1-C_4)alkylamino or a di(C_1-C_4)alkylamino;

- R_2 represents a halogen atom, a linear alkyl comprising from 1 to 5 carbon atoms which is unsubstituted or substituted with a group chosen from a chlorine atom, a hydroxyl, an amino, a mono(C_1-C_4)alkylamino or a di(C_1-C_4)alkylamino; a (C_3-C_7)cycloalkylamino,

or R_2 represents a phenoxy, a phenyl, a thiol, a phenylthio, a chlorophenylthio, a pyridyl, a pyridylmethyl, a 1-pyridyl-1-hydroxymethyl, an imidazolylmethyl or a 4-thiomorpholinyl,

of one of its pharmaceutically acceptable salts or of one of its hydrates.

2. Process according to Claim 1, for treating an animal belonging to the equidae family.

3. Process according to Claim 1, for treating a horse.

4. Process according to Claim 1, for treating lameness which appear during osteoarthrosis, osteochondrosis, navicular disease or enthesopathy of the bony insertions of the tendons, of the ligaments or of the aponeurosis.

5. Process according to Claim 1, comprising the administration of from 0.001 mg/kg to 100 mg/kg of body weight of the said bisphosphonic acid derivative.

6. Process according to Claim 1, for treating limps in horses, comprising the intravenous administration of from 0.01 mg/kg/week to 1 mg/kg/week of tiludronic acid or of one of its pharmaceutically acceptable salts.

7. Process according to Claim 1, comprising the oral administration of the said bisphosphonic acid derivative.

8. Process according to Claim 1, comprising the parenteral administration of the said bisphosphonic acid derivative.

9. Process according to Claim 1, comprising the administration of the said bisphosphonic acid derivative in the form of an implant.

10. Process according to Claim 1, in which the said bisphosphonic acid derivative is selected from:

- 1-hydroxyethylidenebisphosphonic acid and its sodium salts;
- 2-pyrid-2-ylethylidenebisphosphonic acid and its sodium salts;
- dichloromethylenebisphosphonic acid and its sodium salts;
- 3-amino-1-hydroxypropylidenebisphosphonic acid and its sodium salts;
- 4-amino-1-hydroxybutylidenebisphosphonic acid and its sodium salts;
- 6-amino-1-hydroxyhexylidenebisphosphonic acid and its salts;
- phenoxymethylenebisphosphonic acid and its salts;
- thiomorpholinomethylenebisphosphonic acid and its salts;
- 4-chlorophenylthiomethylenebisphosphonic acid and its salts;
- 1-hydroxy-2-(3-pyridyl)ethylidenebisphosphonic acid and its sodium salts;

- 1-hydroxy-2-(2-imidazolyl)ethyl-1,1-bisphosphonic acid and its salts;

- (cycloheptylamino)methylenebisphosphonic acid and its salts;

- 2-hydroxyethylidene-2-(3-pyridyl)-1,1-bisphosphonic acid and its sodium salts.

11. Process according to Claim 10, in which the said bisphosphonic acid derivative is 4-chlorophenylthiomethylenebisphosphonic acid.